



Volume 13—No. 1

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## WEST COAST SETS RECORD

In reaching a 3,000-hour life between overhauls with Rolls-Royce Dart 511 engines in its turboprop Fairchild F-27s, West Coast Airlines of Seattle, Wash., is believed to be the first operator to achieve such a record for twin-engined planes.

To reach this figure, West Coast has not missed a single possible increase in engine life between overhauls since commencing on the F.A.A. turbine time control programme, which reflects credit on the maintenance and flight operations groups within the company.

In operating as a local service airline, West Coast serves over 60 cities in the Pacific Northwest. Its fleet of F-27s fly an average of eight hours per day, in some of the most rugged country in North America, its routes criss-crossing the Rocky Mountains.

An earlier but similar mark of the Rolls-Royce Dart, which powers the four-engined Vickers Viscount, has achieved an overhaul life of 3,500 hours with Trans-Canada Air Lines, an unprecedented figure.

## MEDICINES AND FLYING—

Pilots should be alert to the possible hazards of flying after trying to douse a cold or infection with antibiotics and other medicines. These medicines can slow down various body processes which keep the body from functioning at top level.

## MONTANA AVIATION TRADES ASSOCIATION WILL SPONSOR FLIGHT INSTRUCTORS REFRESHER COURSE

Montana civil flight instructors will have the opportunity to attend a ten day refresher course, from March 5 to March 14, according to Al Newby, President of the Montana Aviation Trades Association.

Newby said the course is patterned after a highly successful course that has been held in Canada for the past 10 years. Representatives from Montana attended the course in Canada this past summer and were very impressed.

Instructors attending the course will not only benefit from the experience of F.A.A. instructors and advisors, but will gain from the experience of one another. The ten day course, which will be held in Great Falls, will consist of approximately forty hours of ground school instruction, fifteen hours of flight training, and eight hours of link time. Subjects to be covered are the teaching of flight maneuvers, instruments, air traffic control, meteorology, and the psychology of training flight students.

Instructors in the ground school portion of the course will be from the F.A.A. Aeronautics Center Training School at Oklahoma City and the U.S. Department of Commerce Weather Bureau.

Bill Cantwell and Bernie Geier, F.A.A. Safety Agents for Montana, will be in charge of the flight training portion of the course. Dick Munroe, Montana Aeronautics Commission Safety and Education Officer, is Course Manager.

Montana flight instructors selected to attend the course will receive mileage to and from Great Falls, board and room, all manuals and equipment necessary for the course, and upon successful completion, a \$100.00 scholarship for attending.

The course will be limited to 20 instructors. Applications to attend the course will be available from any Flight Operator in Montana, or by writing to Mr. Homer Holman, Skyway Flying Service, International Airport, Great Falls, Montana.

Screening of applications and selection of students will be done by MATA representatives. The applications must be returned to Mr. Holman in Great Falls no later than February 10 to be considered for selection.

## MISSION FIELD—LIVINGSTON UNDER NEW MANAGEMENT

Paul Tilleman, of the Livingston Flying Service, has been named Manager of Mission Field at Livingston.

Paul informs us that 80/87 and 100/130 octane fuel, minor repair, taxi or courtesy car are available on a twenty-four hour basis.



**Official Monthly Publication  
of the  
MONTANA AERONAUTICS  
COMMISSION**

**Box 1698**

**Helena, Montana**

**Donald G. Nutter, Governor**

**Charles A. Lynch, Director**

**Clarence R. Anthony, Chairman**

**E. B. Cogswell, Vice Chmn.**

**Herb Jungemann, Secretary**

**Walter Hope, Member**

**Carl (Bill) Bell, Member**

**Gordon R. Hickman, Member**

**Al Newby, Member**

**R. J. (Dick) Munroe, Editor**

### **DIRECTOR'S COLUMN**

It is with pride and pleasure and a sincere desire to function efficiently and productively that I assume the duties of Director for your Montana Aeronautics Commission.

I refer to your Commission so that you may better know and understand the duties and responsibilities of these gentlemen, and more fully understand their allied responsibilities to the segment of society, industry and government from which, by law, they are chosen by the Governor of our State.

First, let me point out the far-sightedness, research and just thinking that was reflected in the draft of the original Montana Aeronautics Law by the sixteen-man committee in the later years of World War II when this bill was initially placed before the 1945 Legislature. They reasoned that aviation could best be fostered, developed, promoted, regulated and controlled by men who had both the sincere appreciation of flying and the allied responsibilities in other fields relative to things aviation.

Therefore, by law, the seven-man Commission must be composed of one each of the following: One from the Municipal League, presently represented by Gordon Hickman, City Attorney of Harlowton; one from the County Commissioners Association, fulfilled by Walter Hope, County Commissioner of Big Horn, Montana; one as a representative of Interstate Commercial Airline Operators, which seat is held by

Herb Jungemann, Station Manager of Western Airlines in Billings; one selected from the Montana Pilots Association, whose present representative is Bill Bell of Bell Mortuary in Glasgow; one from among those actively engaged in Aviation Education in Montana, with representation by Clarence R. Anthony of Helena Public Schools, our current Chairman; one who is an active Base Operator in the State at the time of appointment, which seat was recently assigned by the Governor to Al C. Newby of Flight Line, Inc., at Belgrade, Montana; and one from Montanans', Inc., which more recently is the Montana Chamber of Commerce, and in this position, we have our senior member on the Commission, Ted Cogswell of The Cogswell Agency in Great Falls.

**These men have the two-fold duty of protecting your aviation interests, while watching over your city, county, educational and industrial interests relative to aeronautics. The law rather clearly and sincerely stipulates that the Commission will, not by prerogative, but as a duty, have general supervision over aeronautics within the State, and is empowered and directed to encourage, foster and assist in the development of aeronautics in the State and to encourage the establishment of airports and other air navigation facilities; and in a very reasonable manner, the cost of administration of this law for the industry shall in turn be produced by revenues on and from the industry.**

We have a tremendously important function relative to the future economic growth and travel in a spacious and strategically important state in terms of national defense, reserves for production of food stuffs and industrial development.

Therefore, is it not natural that we of aviation in Montana should not exert every effort to develop our industry to accommodate the presently increasing group of flying tourists to enhance industrial development through increased air service, both scheduled and non-scheduled, to increase the production of food stuffs through better agricultural methods with the use of aircraft and to add utility and greater serviceability to

the airplane in the hands of pleasure and business users through assistance to the general aviation industry, and the development of landing areas and facilities?

**Remember, the airplane is as useful as we have places to go, and we are going everywhere IN MONTANA.** Charles A. Lynch, Director.

### **EKALAKA'S FLYING PHYSICIAN DECOMPRESSED**

Among a score of F.A.A.'s 5,047 Aviation Medical Examiners learning the hazards of decompression in high altitude flight and how to cope with them, was Ekalaka's Flying Physician, Dr. Richard E. Musser.

Dr. Musser attended the indoctrination course at Ellsworth Air Force Base in December.

Among the medical problems covered were respiration and circulation, hyperventilation (overbreathing) spatial orientation and disorientation (dizziness), noise and vibration.

Before graduation, Dr. Musser took a chamber "flight" in which he was subjected to rapid decompression. This simulates how sudden pressure loss would affect judgment and flying skill. Mrs. Musser reports that Doc survived.

The Mussers flew their Cessna 210 on the Chamber of Commerce sponsored Air Tour to Canada and Alaska this past summer.

### **COMING AVIATION EVENTS**

Feb. 10—Applications for Flight Instructors Refresher Course due.

Feb. 12—Great Falls Hangar, Montana Pilots' Association monthly meeting. Horizon Club, dinner meeting 7:30 p.m.

March 5—14th Montana Aviation Trades Association Civil Flight Instructors Refresher Course, Great Falls. Contact Mr. Homer Holman, Skyway Flying Service, International Airport, Gt. Falls.

May 27—Flying Farmers and Ranchers annual meeting. Langhus Ranch, Big Timber.

### **NOTICE: SMALL AIRPORTS**

The MAC now has available a limited supply of surplus duplex beacon lights. Any information desired may be obtained from this office.



## Operator's Corner



**Operator of the month is Eugene L. Mendel, owner and operator of Mendel Flying Service at Malta, Montana.**

A native Montanan, Gene was born and raised at Winifred, but moved to Kalispell where he finished his last year of high school.

During World War II, he served on a submarine out of Pearl Harbor and also qualified as a Navy deep sea diver.

In 1950, Gene switched elements and took to the air with the late Gene Cole of Kalispell as his flying instructor. (Cole was killed later while flying fire patrol.) After qualifying for his pilot's license, he worked for Cole at Kalispell and did crop spraying for Burn's Flying Service at Sidney.

In 1953, he enrolled in the Helena Aeronautics School and obtained an A&E license in 1956. While attending the school, he worked part time for Morrison Flying Service in Helena. In the spring of 1956, he started his present flight operation in Malta.

Mendel Flying Service does line partol, game census, agricultural work, charter, air ambulance, ground and flight instructor and major or minor A&E work and inspection. They have 80-100 octane fuel available, heated storage and transportation upon request. In addition, a satellite operation does agricultural work out of Stanford, Montana, during spray season. Al Ledbetter assists Gene as a commercial flight instructor.

Gene and his wife, Elaine, have two daughters, Donna, 4 and Susan, 2. He is the past president

of the Montana Aviation Trades Association, a past vice-president of the National Aviation Trades Association and a member of Kiwanis and Toastmasters.

### 121.5 MG FOR CRASH LOCATER BEACON

The F.C.C. has approved the frequency of 121.5 MG as the frequency for crash locator beacons installed in aircraft or on life rafts. It is hoped that this step will clear away many obstacles which has existed in the plan of developing a crash locator beacon suitable for installation in light aircraft. Actually, several types have already been developed by manufacturers of aeronautical equipment.

Now that a frequency has been approved which can be utilized by existing receivers and practically all light aircraft, encouragement exists for development of approved designs of light weight and reasonable range. Next problem is obviously that of a battery having sufficient life and power to produce a signal which can be picked up on a build fade system 40 miles distant at altitude. The signal should continue for at least 24 hours. It probably would be intermittent which would have the advantage of attracting attention and saving battery power.

The National Association of State Aviation Officials has taken an active interest in development of such a beacon, and with approval of this desirable frequency will continue the program of encouraging design and installation of such beacons.

The obvious advantage of a locator beacon in event of a wilderness crash is that of expediting finding of the wreckage and bringing aid to any survivors; if there were no survivors, the beacon would still reduce search to a relatively short time in contrast to the frequent periods of a week or more during which all persons aiding the search are exposed to many hazards.

If the number of cricket chirps per minute is divided by four and added to 40, the resulting number will usually be the approximate temperature of the air in degrees, Fahrenheit.



### CONGRATULATIONS !!

#### CERTIFICATES ISSUED RECENTLY TO MONTANA FLIERS

Arden Alexander McKinnon, Westby, Student.  
 Ronald James Lund, Billings, Student.  
 Harold Hamersmark, Billings, Student.  
 Lois De'Ette DuPree, Billings, Student.  
 Ronald Joseph Rosenhahn, Billings Link Ground Instructor Rating.  
 Glen Glae Hobbs, Glasgow, Student.  
 Harvey Backrach Rosenberg, Glasgow AFB, Private.  
 Glenn Willard Bruckner, Malta, Private.  
 Herbert Frank Lair, Glasgow, Private.  
 James A. Jensen, Plentywood, Private.  
 Russel A. Klingler, Glasgow, Student.  
 Frank Jensen, Hinsdale, Student.  
 Wallace Duane Quitmeyer, Poplar, Student.  
 Chester Douglas Juel, Scobey, Student.  
 Monica Mary Hardy, Redstone, Student.  
 Michael Delbert Kating, Glasgow, Student.  
 Thomas Franklin Simms, Hardin, Student.  
 Bill Clifton Pulliam, Billings, Private.  
 Russell Duane Cebulski, Malta, Private.  
 William Bruce Danner, Sidney, Student.  
 William Eugene Wegner, Billings, Student.  
 James Edward Sullivan, Student.  
 John Henry Sparboe, Billings, Student.  
 Dale Strissel, Billings, Private.  
 James Kenneth Wise, Billings, Student.  
 Francis Clement Rice, Student.  
 Marlene Joan Davis, Billings, Student.  
 John Thomas Brown, Red Lodge, Student.  
 Ludvig O. Honrud, Opheim, Student.



Hans Fredrik Stannebein, Richland, Student.  
 Robert Richard Matti, Billings, Private.  
 Donald Edward Marchwick, Glasgow, Student.  
 George Harold Stensland, Wolf Point, Private.  
 Claude Eugene Breese, Poplar, Private.  
 John Hubert Kemp, Plentywood, Private.  
 Clifford Dale Tyree, Sidney, Private.  
 Lynn Dale Haidle, Fallon, Private.  
 Paul Edward Herzog, Miles City, Student.  
 John W. Kuhlmann, Billings, Private.  
 Robert A. Fraser, Kalispell, Com. ASEL & Instrument.  
 Robert R. Johnson, Deer Lodge, Student.  
 Larry Virgil Fite, Missoula, Parachute Rigger.  
 Murray James Brown, Lodge Grass, Student.  
 Phylliss Clara Sammons, Cut Bank, Private.  
 John T. Rowley, Kalispell, Private.  
 Dennis G. Hensley, Havre, Student.  
 John J. Schulz, Missoula, Student.  
 Ronald L. Torgerson, Ethridge, Student.  
 Clair William Olson, Livingston, Student.  
 Robert D. Colby, Kalispell, Student.  
 Lawrence C. Stalnaker, Helena, Student.  
 James D. Lynch, Missoula, Student.  
 Lawrence P. Davis, Havre, Student.  
 Gilbert C. Dopp, Missoula, Student.  
 William Francis O'Haire, Great Falls, Private ASEL.  
 James William Connelly, Great Falls, Private ASEL.  
 Monte E. McCann, Great Falls, Limited Flt. Instructor.

During a 1906 debate on expenditures for the Air Force, an unidentified Congressman demanded, "Why all the fuss about airplanes—the Army has one, hasn't it?"

Ad: "Your choice, 1941 Piper J-5 three-place, \$600, or 1919 model full-blooded Norwegian wife, very hot tempered, \$6,000.00. Can not keep both."



**The vivacious Officer Manager for the Montana Aeronautics Commission is Peggy Mitchell.** Peg was born March 28, 1931 in Williston, North Dakota. Her early years were spent on a farm near Culbertson. Her father is General S. H. Mitchell, the Adjutant General of the State of Montana.

After graduating from Helena High School, she attended the State University at Missoula. While there she was an officer in Kappa Kappa Gamma social sorority; President of Mu Phi, womens music honorary; and did solo work with many of the singing groups on the campus. For economic reasons, she has turned her music in for a typewriter and her able managing of the Commission office is a credit to the State of Montana.

Peg called California home for nine years and while there was Office Manager of a Food Brokerage Firm in Los Angeles.

She began work for the Montana Aeronautics Commission in 1958. At the time she admits to not knowing a Piper Cub from a DC-7, but three and a half years have changed that and stimulated her interest in aviation. She plans on taking ground school at Morrison Flying Service as soon as Jeff Morrison gets up nerve enough to start a class exclusively for women.

She and her seven year old daughter, Karen live in East Helena where Karen attends first grade.

## M.P.A. REPORT GREAT FALLS HANGAR



**HEALTH BAR:** Mr. and Mrs. Scott Stanley serve at the Great Falls Hangar New Year's Eve party. Scott was chairman of the celebration.

One hundred members of the Great Falls Hangar of the Montana Pilots Association gathered at O'Haire Manor New Years Eve. Old 1961 was gently shown the door, while 1962 was brought in with a sonic boom.

Participants in the gala occasion enjoyed a smorgasbord dinner, refreshments, swimming (see Ad this Newsletter) musical selections by Vern Cope, door prizes courtesy of O'Haire Manor, and dancing.



"Actually I didn't join this organization because I was interested in flying."

## FEDERAL AVIATION AGENCY INSPECTION ITINERARY

| AIRPORT                   | FEB.       | MARCH      |
|---------------------------|------------|------------|
| Culbertson Municipal      | 8          | 8          |
| Gallatin Field (Belgrade) | 13**-14*   | 20**-21*   |
| Glasgow Municipal         | 7          | 7          |
| Glendive Municipal        | 20         | 21         |
| Great Falls Internat'l.   | 7**-8*     | 6**-7*     |
| Havre City-County         | 9          |            |
| Helena City-County        | 5-12-19-26 | 5-12-19-26 |
| Lewistown Municipal       |            | 28         |
| Logan Field               | 5-12-19-26 | 5-12-19-26 |
| Miles City Municipal      | 21         | 22         |
| Missoula County           | 27**-28*   | 28**-29*   |
| Silver Bow County (Butte) | 15         |            |

\*Written Exams Only  
 \*\*Flight Tests Only

January 1, 1947—There are now 4,026 airports and seaplane bases in the U.S.



## EXAM-O-GRAM NO. 7

### GETTING CAUGHT ON TOP OF AN OVERCAST

1. DO YOU HAVE ALL OF THE FOLLOWING REQUISITES FOR INSTRUMENT FLIGHT?

(1) An Instrument Rating, (2) an aircraft fully equipped for instrument flight, and (3) recent instrument experience. If not, you should heed the following bit of advice concerning flight over an extensive overcast cloud condition—DON'T!

2. SHOULD YOU AVOID FLYING VFR OVER CLOUDS ENTIRELY? No. Many times it is both practical and desirable to select a cross-country cruising altitude above a scattered cloud condition to take advantage of smoother air, improved visibility, more favorable winds, or provide for more terrain and obstacle clearance, providing (1) you have legal cloud separation for climb, cruise, and destination descent, (2) weather conditions are stable or improving, and (3) you stay alert and take immediate action if the clouds beneath you increase and the "sucker holes" start to shrink. Don't wait too long to descend or make a 180° turn (one of aviation's oldest safety devices) if the situation warrants it.

3. WHAT OTHER PRECAUTIONS SHOULD YOU TAKE TO AVOID AN "ON-TOP-OF-AN-OVERCAST" TRAP? (1) Prior to your cross-country flight, visit the local Weather Bureau Airport Station or your nearest FAA Flight Service Station for a thorough weather briefing (see EXAM-O-GRAM No. 5). Select an altitude that will be compatible with terrain and cloud separation requirements. (2) Use reasonable restraint in exercising the prerogative of VFR flight when conditions are close to minimums. Remember that, with the right conditions, a low overcast can form under you in a matter of minutes. Consider the weather, the terrain you are flying over, and allow yourself a margin of safety commensurate with your experience level. (3) When you file your VFR flight plan with an FSS, request Flight Following Service in order to take advantage of special weather briefings from your en route designated Flight Watch Station(s) (See EXAM-O-GRAM

No. 6). Also, monitor appropriate frequencies for scheduled weather broadcasts at 15 and 45 minutes past each hour.

4. WHAT SHOULD YOU DO IF YOU SHOULD GET CAUGHT ABOVE AN OVERCAST? You are admittedly "in a jam." Loss of orientation, a very probable sequel to loss of ground references, will further complicate your problem. However, you can improve your chances of avoiding disaster by following a few logical procedures. (See **Flight Information Manual**—"U. S. Aircraft Emergency Procedures"). For example, you should (1) establish communications with an FSS or other ground stations and **confess your predicament**. The personnel in these stations are well trained in assisting airmen in distress; give them a chance to help you before it's too late. If necessary they can alert available VHF Direction Finding and Radar Station (including military stations) to stand by for possible assistance. (2) If you have trouble establishing contact with a ground station, climbing will increase the range of your VHF radio equipment and improve the chances of ground radar detection. (3) Conserve your fuel by using an economical or maximum endurance power setting. (4) If you really need help, **comply** with instructions received from your ground station.

5. **Prevention** is a much better approach to this problem than the cure. If you are a VFR pilot, **AVOID GETTING CAUGHT ON TOP OF AN OVERCAST!**

### EFFECTIVE AND REALISTIC REGULATION F.A.A. GOAL

Changes proposed under the Federal Aviation Agency's plan to revise general aviation operating rules will be discussed publicly for the second time in eight regional conferences scheduled in April.

Initial discussion took place last October when nearly 3,000 airmen gathered at 88 Air Share meetings across the country. They commented on the current Part 43 of the Civil Air Regulations—which covers flight rules for general aviation—and suggested changes. These comments are being analyzed, and the FAA will

present the changes it recommends at the April sessions.

This series of meetings is part of a concerted drive launched by FAA Administrator N. E. Halaby last year to establish better, closer relations with the "grass roots" of the aviation community. It is an effort aimed at the widest possible direct discussion with airmen of FAA programs and policies so they will be clearly understood—and so they can be changed where appropriate to be more responsive to aviation's needs, but still not compromise safety in any way.

Another facet of this effort has involved a series of "hangar flying" sessions in which Halaby exchanged views with general aviation pilots across the country. Next month, a similar series of meetings will be launched with aviation maintenance personnel. The initial maintenance session will be held February 2 at Washington National Airport.

Effective and realistic regulation of general aviation is a prime FAA goal, both to improve service to the present fleet and to provide for its vigorous growth. This growth trend was marked last year by an increase of 4,250 aircraft, bringing the fleet to approximately 80,000 by the end of 1961. A total of 105,000 general aviation aircraft—all civil airplanes except airliners—is predicted by 1970.

The FAA offers a variety of services to this growing fleet, including the Flight Following Service begun early in 1961. Provided through the Agency's 421 Flight Service Stations, this new flying aid received early acceptance and has seen increasing pilot use during its first year. Under Flight Following Service, FAA monitors a pilot through his entire flight, making weather and other advisory information available through each facility over which he flies.

In Fiscal Year 1961 FAA Air Route Traffic Control Centers handled 296,040 Instrument Flight Rule (IFR) departures by general aviation aircraft. This was an increase of 35,000 IFR departures over the previous fiscal year when there were 261,027.

Also in Fiscal Year 1961, FAA's 240 airport traffic control towers handled a total of 14,925,312 gen-



eral aviation movements. The Agency commissioned a total of 26 airport traffic control towers in calendar year 1961 bringing the total at the end of the year to 254.

Radar advisory service was another aid instituted for Visual Flight Rules pilots last year at Washington, Indianapolis and New York's Idlewild control towers. It had been under development earlier at Atlanta. This service is available on request. The controller provides a pilot with advisory information, based on radar observations, on air traffic in congested areas.

To help general aviation pilots in flying clubs become more proficient, FAA personnel discuss instruction techniques and procedures with flying club operators. Last year these safety inspectors gave courtesy flight checks to 132 members of more than 100 military flying clubs. They also attended 92 regular club meetings and spoke on flying techniques, good operating practices and emergency procedures.

In November, FAA General Aviation Safety Agents conducted 257 meetings in which 6,774 airmen were briefed on the special flying hazards created by cold weather conditions. In another series of meetings, 2,409 pilots joined FAA personnel in discussion of accident prevention measures.

The Agency's Blue Seal program was launched in October to encourage pilots to acquire enough instrument flying ability to get themselves out of any poor weather or visibility conditions they might accidentally encounter. The Aircraft Owners and Pilots Association cooperated in this effort by preparing a pilot's manual and an instructor's syllabus for the AOPA 360 Degree course. This course is not designed to give a pilot full instrument rating, but rather to give him sufficient ability to maintain the proper attitude until he can fly out of deteriorating weather and back to an area where he can fly under Visual Flight Rules conditions.

Nearly 20,000 manuals and 1,200 instruction syllabuses have been distributed. When a pilot qualified, the FAA re-issued his certifi-

cate imprinted with the Agency's Blue Seal to indicate that he has this minimum instrument capability.

To help airmen understand the regulations under which they operate, a "plain language" summary of CAR Part 43, the general aviation operating rules was prepared for the Air Share meetings and for general information. A broader subject, which will produce an integrated, simplified version of all general aviation regulations, is under way.

The growth of general aviation depends heavily on development of the nation's airport complex, and the FAA asked and received from Congress last year the authority to earmark \$7,500,000 a year specifically for general aviation fields. This will provide ground facilities for the expansion of general aviation flying and also will relieve congestion at the larger airports.

The conference for this region will be held at Skyway, Inc., Hangar, Van Nuys Airport, April 28 at 10 a.m.

### **MONRONEY RAPS U. S. CIVIL AVIATION**

Sen. A. S. Mike Monroney (D-Okla.) in a speech given December 18 at the annual Wright Day Dinner in Washington, leveled critical remarks at a civil aviation industry whose tendency he said is to "employ fewer people to produce fewer, bigger, faster and more expensive aircraft, operated by fewer crews, working for fewer airlines to provide less frequent service at higher costs to few of America's cities." The Senate aviation leader suggested that the latter results of such a movement will be disastrous. Monroney received the Wright Brothers Memorial Trophy at the annual dinner.

"Every transport aircraft in production in the U.S. today," Monroney said, "is competing for the same limited specialized market—the high-density, long-range passenger routes." He said the only long-range cargo plane in use by American companies today is of Canadian manufacture. And the only short-range turbo-prop cargo and passenger aircraft are British and Dutch products

while employment in the domestic transport aircraft industry declines at an alarming rate, he said.

Monroney declared that not only must more effective pricing and scheduling be employed to attract the mass travel market, but there also must be more attention given to a variety of other aviation activities. "The most obvious opportunity of all presents itself in the field of air cargo. We are in the process of dragging the American aviation industry kicking and screaming into the air cargo age. It has been tough work, but there is some indication that the industry is now prepared to try and live and grow in the new era," Monroney said.

Monroney said he was confident there would be a civil market for a counterpart of the military C-141 now under development, "the profits of doom notwithstanding." But it is also obvious, he said, that the growth of air cargo will depend as well on the development of short and medium-range cargo craft. He related the growth of this field directly to the need for military mobility and urged that government policy "actively encourage the maximum development of civil cargo capacity." Government traffic must be offered as inducement to air carriers to obtain modern air cargo equipment and it must be "more direct, specific and consistent than it has been to date," he said.

Monroney also revived the idea of government guaranteed loans to aid cargo fleet modernization. He also expressed favor for development and modernization of supplemental carriers with a specialty of providing contract services for the Defense Department. He said these carriers have an advantage over carriers with route responsibility enabling them to be more responsive to military requirements "and their potential should be developed—not extinguished," he declared. Monroney urged that means be made available to translate the U.S.'s huge surplus piston fleet into useful transport for the benefit of more remote areas of the world. He said they could be come by through loans, credits and guarantees available through foreign aid programs.



## **ACCIDENT PREVENTION**

### **BERNARD A. GEIER**

#### **FAA GENERAL SAFETY INSPECTOR**

During the review of accidents that have been reported, many causes of accidents come to light. We have, many times, been able to prevent or decrease appreciably a certain type of accident by merely simulating the conditions that cause the accident, while at a safe altitude, and thereby show the student just what to look for and what to do to prevent the accident. The present day flight tests are all based upon the maneuvers or conditions of flight that have resulted in accidents. As an example, there have been many accidents caused by a person circling a given object and losing control of his aircraft and allowing the aircraft to divide attention between the flying of the aircraft and looking at the ground object. We, therefore, have a maneuver on the private pilot flight test where we fly around a point, maintaining a constant radius and altitude. This requires the correction for wind drift and the proper control of the aircraft to prevent diving, climbing or stalling.

Many other accidents occur from conditions that cannot be simulated. Review of many accidents have indicated that good number of accidents, generally of a minor nature but still doing considerable aircraft damage, have occurred during the latter part of the morning or the latter part of the afternoon. A few years ago, the Air Force became quite concerned with the same type of accident and their investigation into these accidents, along with a physical check of the pilot immediately following the accident, revealed that, in many cases, the pilot suffered from fatigue as a result of a lack of blood sugar at the time of the accident. To continue this a little further, some of the food a person eats supplies sugar to the system to be transported by the blood to give energy to the portions of the body that must react to perform certain required functions. When the energy is depleted, the reaction time of the body is increased. If the individual would add food to the system at this time such as a candy bar, he would derive renewed energy for a period of

time. Generally this becomes necessary every three hours for best results. The food in this case increases the sugar released to be used by the body.

Let us take a hypothetical situation. Mr. G. arises in the morning at Billings at 4:00 a.m. to get an early start on a trip in his personal aircraft to Los Angeles. At this time of the morning he is not too interested in a large breakfast, so he has a cup of coffee and a piece of toast with the idea that he will stop at Salt Lake and have some breakfast. The coffee and toast has added very little sugar to his system. He arrives at the airport, checks weather and his aircraft and is airborne by 5:30. All goes fine, except that he runs into a strong Southwest wind that was not forecasted so that it becomes necessary for him to stop at Malad City, Utah for fuel. As luck would have it, Malad City does not have a restaurant on the field and he does not want to take the time to go to town, so he goes on with his flight with the idea he will land at Las Vegas and have lunch rather than landing at Salt Lake. Upon approach in the Las Vegas area at 11:30 a.m., he has been operating for a long period of time since breakfast and is suffering somewhat from fatigue. The Las Vegas wind and temperature have both increased so that he is forced to land with a 25 knot cross wind and a temperature of 110 degrees. During his approach he fails to recognize that his rate of descent and true airspeed is above normal due to the air density and that he is drifting due to the crosswind. When he does recognize the fact, his reaction time has been slowed down due to the fatigue factor and he lands hard and drifting and we have another accident. Possibly, Mr. G. could not tell you why he did not recognize the conditions. Very possibly, he has encountered this condition many times before but has always recognized the condition and took appropriate corrective action to land safely. Now the question is what could he have done to save himself the expense, the embarrassment, and the accident. First, he should have had a more substantial breakfast. Secondly, he could have had a candy bar in the glove compartment for

such occasions as the condition that he encountered at Malad City. This would supplement the sugar received from the breakfast and would have given him the energy boost needed to assist him during his Las Vegas landing. The flight ending would have been more of a happy landing.

I recently read of an airline pilot assigned to a long overseas run who would always eat a candy bar or two and use oxygen just prior to beginning his let down to the airport of destination. He realized that both the candy and the oxygen gave him the boost necessary to handle any unforeseen situation he might encounter on landing. The same old story of the ounce of prevention works in aviation, too.

### **"WHAT'S THE WEATHER"**

Weather Bureau personnel report that many telephone inquiries from pilots start off with a stock question, "What's the weather?" To the weather man, this opens broad territory. Is the calling party interested in planning a crop, drying the family wash, driving to New York, or aviation weather. To find out, it is necessary to interrogate the calling party. All of this makes for more talk and more time on the phone.

When calling for aviation weather, please state, "Requesting aviation weather for (VFR) (IFR) from (here) (to) (there)." This will expedite information which the station can provide and get everyone off the wire quickly.

### **MECHANICS REPORT**

During our take-off on a training flight, as I was tightening a loose hydraulic connection, I suddenly saw that an engine was on fire. Wrench in hand, I turned, touched the pilot calmly on the shoulder with it and told him, "We're on fire."

He soon had us safely back on the ground, and a short time later I was modestly explaining my great presence of mind in a trying situation to an admiring audience. Just then two medics passed carrying our pilot on a stretcher. I called, "What's the matter with him?" "Broken shoulder," came the answer.



# AIRPORT PROJECT NOTES BY JIM MONGER, AIRPORT ENGINEER



Recently completed airport projects in Montana:

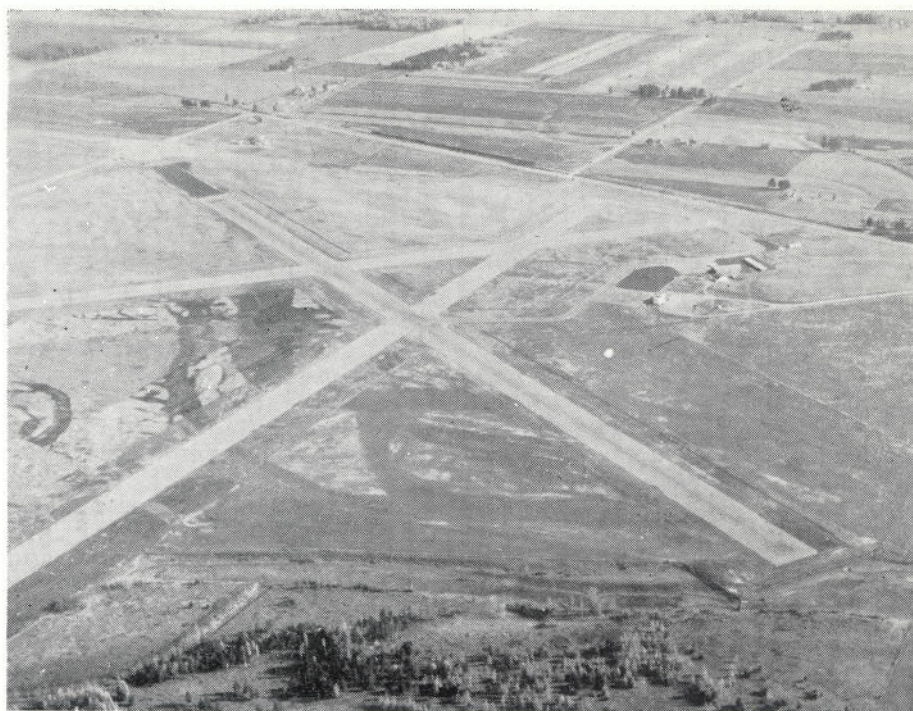
**Scobey:** A new runway was constructed at the Scobey Airport. This paved runway is 2,800' long and 75' wide. It runs in a NW/SE direction. The total cost of the project was \$40,700, with the Aeronautics Commission loaning \$10,000 and the FAA participating with a grant of \$22,000. A hangar and the beacon were re-located in this project.

**Kalispell:** The Flathead County Airport was improved with a runway extension, a new lighting system, and the construction of new taxiways and holding aprons. The total cost of this project was \$116,900. The Montana Aeronautics Commission loaned \$28,000 for assisting in financing on this project. It was a joint Federal, State and local project.

**Great Falls:** The city of Great Falls placed an asphaltic concrete overlay on the N/S runway at the Great Falls International Airport. Total cost of the project was \$197,000. The Montana Aeronautics Commission participated in this project with a loan in the amount of \$50,000. This was a joint FAA, Montana Aeronautics Commission, and City venture.

**Columbus:** The city of Columbus has recently constructed a new 2,700' paved E/W runway. The Montana Aeronautics Commission loaned \$5,270 to assist in the financing of this Local and State project.

**Winifred:** The town of Winifred recently constructed a new runway and runway lighting system. The Montana Aeronautics Commission loaned \$1,500 on this State and Local project. The runway is stabilized turf surface and is 2,600' long and 200' wide.



**Kalispell Airport**

**East Poplar:** A border crossing airstrip was recently reconstructed at the Port of Scobey on the U.S.-Canadian Border. This airstrip was sponsored by the Montana Aeronautics Commission at a total cost of \$9,500. The E/W runway is 3,300' long and 75' wide with a stabilized turf surface. Markers were placed on the runway edge and a new wind cone erected. The powerline at the west end of the runway was placed underground. The Canadians then constructed an adjoining 2,000' N/S landing strip on the Saskatchewan side. Their airstrip was built with voluntary labor. It is meant to be used only in the case of an extreme wind condition. This airport serves as a border crossing office for private aircraft and has been averaging, in summer months, about five aircraft per day. A unicom radio is available with Canadian and American Customs Offices located at the west end of the runway. The runway itself is located on the border line.

**Culbertson:** A unicom radio was installed at the Modern Aire Flight Service to serve that area as an aeronautical advisory radio station.

**Fairfield:** A unicom radio was recently installed to serve this airport.

## Current Airport Projects

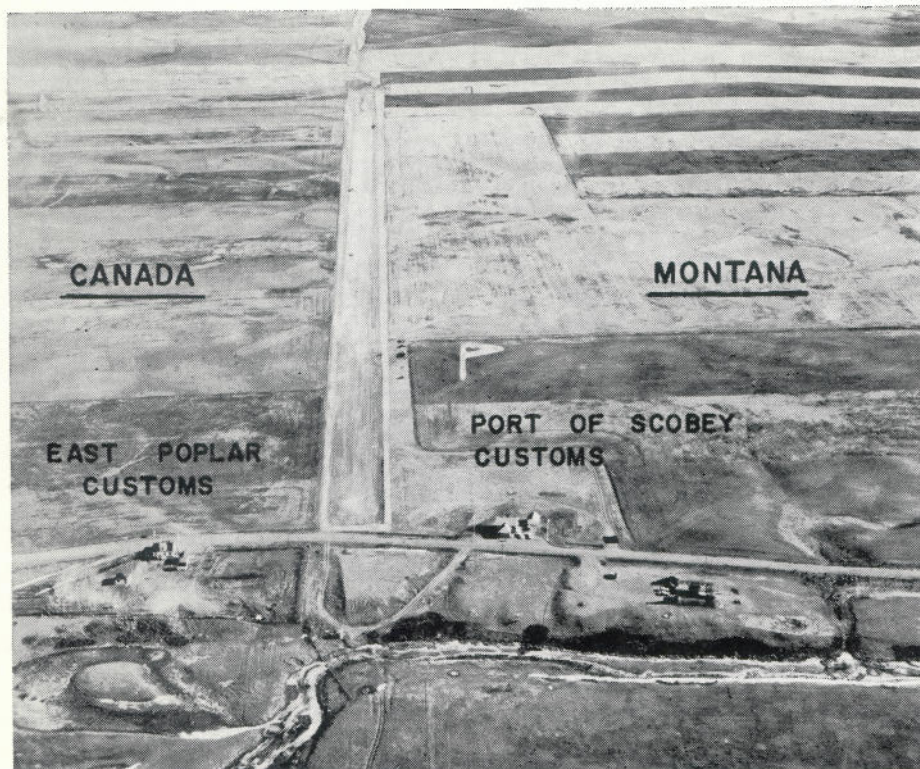
**Miles City:** The joint City-County Airport Board has started construction on a new 70' x 70' hangar-shop building to serve the Miles City Airport. This is a State and local project with the Montana Aeronautics Commission loaning \$10,000 to aid in the financing of this \$25,000 building.

**Red Lodge:** The construction of a new paved runway for the City of Red Lodge and Carbon county is now underway. The Aeronautics Commission has loaned the local Airport Board \$10,000 to apply toward the cost of \$90,600. This is a joint program between the Federal, State and local agencies. The project is now closed due to the weather.

**Bozeman:** The Federal, State and local project at Gallatin Field is now underway. The NW/SE runway is being reconstructed along with new taxiways and aprons. The Montana Aeronautics Commission loaned \$9,999 on this \$322,000 project. Adverse weather has caused a construction shutdown for the winter months.

**Deer Lodge:** Bids were awarded on December 13 for the construction of a new paved NW/SE runway and new taxiways and apron. Total cost is \$62,000. The Montana Aeronautics Commission is participating with the five-year





East Poplar Airport

loan to the City and County totaling \$23,988. The new runway will be 3,800' long and 75' wide. Construction will commence as soon as weather permits. This project is being financed by Local, State and Federal agencies.

**Livingston:** A new paved NE/SW runway 4,200' long with a taxiway and apron is being constructed at Mission Field. The project is now underway and the total cost will be \$97,000. The Montana Aeronautics Commission is loaning the joint City-County Airport Board \$20,000 for this Federal, State, and Local venture. Construction has stopped for the winter months. Livingston did not have a paved runway previously.

January 18, 1905—Wright Brothers write their congressman to determine if their experiments and machine are of interest to the U.S. Government. The reply is a form letter from the President of the Board of Ordinance and Fortifications indicating that the Board is not interested in "financing experiments."

DECEMBER 31, 1930—Airworthiness Requirements for aircraft components and accessories become effective.

### 1961 SAFER THAN EVER FOR CERTIFICATED AIRLINES

The Civil Aeronautics Board has announced that for the 10th consecutive year the fatality rate per 100,000,000 passenger miles flown by U.S. certificated route air carriers was less than one.

The C.A.B. Bureau of Safety Figures revealed that 1961 had proven to be one of the safest years ever flown by U.S. certificated route air carriers. The preliminary fatality rate per 100,000,000 passenger miles flown was 0.29 for 1961 which compared with 0.75 for 1960.

When airlines were young and people were wary of flying, a promotion man suggested to one of the lines that they permit wives of businessmen to accompany their husbands free, just to prove that flying was safe. The idea was quickly adopted, and a record kept of the names of those who accepted the proposition. In due time the airline sent a letter to those wives, asking how they enjoyed the trip. From 90 per cent of them came back a baffled reply: "What airplane trip?"

### WATCH THOSE RESTRICTED AREAS!

A recent communique from the U. S. Army reports some pilots are carelessly penetrating variously situated airspaces that are restricted to the Army's use, primarily for artillery and missile firing. As the Army caution states, "Pilots who penetrate the Army's airspaces are in danger of being shot down by missiles or artillery every time they fly over the designated areas."

In detailing the danger, Col. Lester F. Schockner, Fourth Army Aviation Officer, cited the following hairing examples:

1. A heat-seeking missile guided by radar had locked onto a target, the countdown to fire was in progress, then on the count of "two" an alarm was given that a Twin Beech had flown into the restricted area between the target and the radar. In this instance the radar had inadvertently locked on the Twin Beech. With only two seconds remaining, the firing was stopped—fortunately for the pilot, copilot and passengers aboard the Twin Beech!

2. In another part of the country several artillery guns were given a certain time to fire, and were within 15 seconds of that time when a multi-engine aircraft that had taken off from a nearby airfield flew directly across in front of the guns!

The U.S. Army has made every effort to reduce its restricted airspace areas and to return to the F.A.A. all airspace not actually in use. As a result the areas that remain authorized for Army operations are being used to the saturation point. Also, with the shrinkage of restricted areas and the Army's intensified training program, many gun and missile positions are located at the very edge of the areas instead of some distance in from the boundaries as they formerly were. It follows, therefore, that with this increased use of restricted airspace, the pilots violating these areas are subjecting themselves to ever increasing risks.

In addition to artillery guns and radar-guided heat-seeking missiles being fired in daily practice, target drones cruising at 185 knots are being flown. These drones resemble a six-foot length



of stovepipe and are extremely difficult to observe in flight.

SOooo, unless you are particularly anxious to serve as a target to sharpen the shootin' eye of the Army, check on those restricted airspaces. They are on the F.A.A. aeronautical charts. We would also suggest that you pass the word of warning along to any private pilot you may know. As the Army has said, many civilian pilots do not file flight plans and many times their navigation is done via ordinary highway maps which, of course, do not depict these military danger areas. Remind them to plan their flights carefully and to proceed cautiously. In one month 37 violations of restricted airspace were reported by just one of the areas. It's one thing to have a violation filed against you, but not being alive to answer it is the greater tragedy. Business Pilots Safety Bulletin 61-211, Flight Safety Foundation, Inc.

**FOR SALE:** 7CCM Aeronca N2693E, 1946 Model, 90 continental, 75 hours on engine since major, good fabric. Will be relicensed in next 2 weeks. A wonderful ranch plane or tops for that first 100 hours, \$2,250.00. Phone 683-2461 or 9 miles north of Dillon on Highway 91. Emmett Blomquist.

**FOR SALE:** 1947 P.A. 12, original fabric, a lot of extras. Price \$1,850.00. Ted Sorenson, Crane, Montana.

**FOR SALE:** Aeronca Sedan, Fresh annual. Metal wings, fuselage all worked over and just covered with Ceconite. New paint job. A real doll! New control cables, new battery, new compass. Two sets tires. VHF transmitter, low frequency receiver with direction finder. 1,100 total time, 500 on major, \$3,600.00, contact Dr. J. L. Cromwell, Box 420, Livingston, Montana.

**MISSING:** Prominent Great Falls eye inspector. Officer in local M.P.A. Hangar, 180 driver. Last seen New Year's Eve poised on edge of O'Haire Manor pool wearing one shoe, swimming trunks, formal dress waist up and New Year's fun hat. Notify Great Falls Hangar of the M.P.A.

**AD:** Major and minor aircraft and engine maintenance repair, overhaul and inspection. Twenty years in the business. Bill McNery, Glacier Air-

craft Service, Cut Bank Airport, Cut Bank, Montana.

**AD:** Ross International Field, Sweetgrass, Montana. Aviation gas and oil are available at the Western Star Motel, located adjacent to the runway. Mr. William Fyfe, United States Air Force, retired. Has both 80-87 and 100-139 octane fuel available.

## WE'RE SAFE AT HOME FROM FALLING AIRCRAFT

Oscar Bakke, Assistant Administrator of the Federal Aviation Agency in Charge of the Eastern Region, spoke at a recent National Pilots Association Forum at Westchester County Airport, N.Y., and made this comparison of non-occupant fatalities during the eleven years of 1950-1960:

99,440 automobile, taxis  
11,032 railroad passenger trains  
4,770 buses  
33 domestic air carrier aircraft  
25 general aviation aircraft

His point: Why single out falling aircraft as a special hazard to people on the ground?

### MEMBER

### NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

**PURPOSE:**—"To foster aviation as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in **research, development, and advancement of aviation**; to develop uniform aviation laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."



## News Letter

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